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NEW ANTS FROM STOMACHS OF BUFO MARINUS L. AND TYPHLOPS RETICULATUS (L.)

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all for new ✓

In studying the biology of ants in the Neotropical Region many amphibians and reptiles were found to be of significance as predators. The new ants here described were taken with other ants from the stomachs of the giant toad, *Bufo marinus* L., and the blind snake, *Typhlops reticulatus* (L.).¹

Eciton (Acamatus) ierense sp. nov. ✓

Worker.—Length 1.3–4.6 mm. Head, excluding mandibles, of largest worker distinctly broader than long, of media workers as broad as long, of minima workers distinctly longer than broad. Sides of head in all workers convex, occipital margin in maxima distinctly impressed, in minima transverse or feebly impressed; anterior clypeal margin transverse. Antennal scape clavate, curved outward, $\frac{1}{10}$ as long as head in maxima and $\frac{1}{10}$ – $\frac{1}{10}$ as long in minima workers. Mandibles triangular with acute apical tooth and three shorter but acute teeth widely spaced on the blade. Thorax from above with sides straight but converging from pronotum to epinotum; in profile feebly convex with distinct meso-epinotal impression. Basal surface of epinotum plane, lower than thorax, rounding smoothly into declivous surface without marginations or tubercles. Node of petiole from above broader than long with convex sides. Postpetiole from above distinctly broader than petiole and broader than long, anteriorly narrowed, anterior and posterior margins transverse, sides convex.

Head, postpetiole, and gaster of maxima worker shining, with deep, setigerous punctations. Thorax and postpetiole similarly punctate with the addition of fine reticulations rendering the surface sub-opaque. Minima worker entirely shining with coarse, setigerous punctations. Mandibles coarsely punctate—striate.

Pilosity of fine, sub-erect, long, and moderately abundant hairs.

Color yellowish brown, darker in the maxima worker. Pilosity golden yellow.

¹Dr. Noble (1918, p. 322) mentioned among the ant food of two toads, *Dendrobates tinctorius* (Schneider), in Nicaragua, "*Strumigenys*, 2 species, and *Rhopalothrix*, new species" (det. Dr. W. M. Wheeler). Dr. Bequaert (1922, p. 287) lists these also as above. In 1934 I described (Weber, pp. 52–54) these as *Strumigenys* (S.) *ludja* Mann., ssp. *tenuis*, S. (S.) *elongata* Roger, ssp. *nicaraguensis*, and *Rhopalothrix* (*Octostruma*) *equilata*. An additional ant from one of the same toads was described in the above publication (pp. 51–52) as *Codiomyrmex excisus*.

Described from a score of workers taken by myself Nov. 24, 1934, under a log on grassy, sandy ground close to the sea at Mayaro Bay, Trinidad, B. W. I. (*cotypes*), and from a few worker heads taken from the stomach of a *Bufo marinus* March 22, 1935, between 8:30 and 9:15 P. M., St. Augustine, Trinidad (*metatypes*).

This species appears close to *Acamatus punctaticeps* Emery, comparing with the original description, but differs in smaller size, mandibular dentation, and in antennal scape.

The three following new ants were taken from the stomach of a single *Bufo marinus* near the Forest Settlement, Mazaruni River, British Guiana, 10 P. M., August 30, 1935. In the same stomach were a snail, a spider, an adult and a nymph Hemipteran, two beetles, and ants of the following additional species: *Holcoponera striatula* Mayr, *Pachycondyla harpax* Fabr., *Pheidole fallax jelskii* Mayr, *Campanotus* (*Myrmothrix*) *rufipes* Fabr.

✓✓ *Gnamptogenys sulcatum* (F. Smith), *bufonum*, ssp. nov. *-sulcatum*, type seen

Worker. Length 3.7 mm. Differing from workers from Kartabo placed by Dr. W. M. Wheeler under the typical form in larger size, broader head (head, exclusive of mandibles very slightly longer than broad back of eyes), eyes more median, longer antennal scapes, and in having fewer and coarser striae on thoracic dorsum. Differing from the var. *nitens* Mann in smaller size, smaller eyes, and in having darker mandibles and antennal scapes. Three workers.

✓✓ *Crematogaster* (*Orthocrema*) *brasiliensis* Mayr, *arawak* ssp. nov.

Worker. Length 2.8 mm. Differing from the typical form in having the postpetiolar dorsum entire and not with a median impression, in having posterior clypeal region and frons smooth and shiny instead of microscopically striate-punctate, in having sides of head in front of eyes coarsely punctate-striate instead of finely striate, and in darker color. Differing from the var. *ludio* Forel in being broader in general habitus, with shorter epinotal spines, broader postpetiole, striate-punctate ocular region, and in less regularly striate thorax. One worker.

✓✓ *Procryptocerus goeldii* Forel, *guianensis* ssp. nov.

Female. Length 4.6 mm. Differing from the typical form in more rounded head, less sinuate frontal carinae, epinotal spines shorter, anterior surface of petiole not transversely rugose, postpetiole dorsum more longitudinally rugose, and in gaster being much less longitudinally rugulose. Head, with closed mandibles, slightly longer than wide. Color and size similar. One alate female.

***Eciton (Labidus) serpentis*, sp. nov. ✓✓**

Worker. Length 2-3.5 mm. Head, excluding mandibles, about $\frac{1}{6}$ longer than wide, sides slightly convex, occipital corners evenly rounded, occipital margin straight. Eyes very small, situated posterior to middle of head and dorso-laterally. Antennal scapes clavate, curved outwards, extending posteriorly to beyond the eyes but not to occipital margin. Mandibles triangular, feebly sinuate on outer margin, terminating in acute apical tooth; with edentate distal $\frac{1}{4}$ - $\frac{1}{2}$ of blade and strongly dentate proximal half equipped with about five distinct acute teeth and several smaller tubercles. Dentation variable but with at least three strong teeth on blade. Thorax in profile evenly and slightly convex, antero-dorsally reflexed in a slight collar, posteriorly forming with the lower epinotum a slight concavity. Basal surface of epinotum joining declivous surface at an obtuse angle. Thorax from above with convex pronotal sides passing into sub-parallel and narrower epinotal region. Petiole from above rectangular, longer but narrower than postpetiole, the latter with the more massive node and, from above, trapezoidal with rounded corners and greatest width at posterior margin. Gaster small and ovate. Legs moderately long and slender.

Shining, thorax with fine, raised vermiculations, becoming posteriorly and on pedicel fine reticulations.

Pilosity of moderately abundant upright yellow hairs and distally on appendages a short pubescence.

Yellowish-brown.

Described from a series of workers, mostly in fragments, taken from the stomach of a blind snake, *Typhlops reticulatus* (L.) (det. F. Shreve) August 1, 1936, near the junction of the Oronoque and New Rivers of the Courantyne basin, British Guiana. Also in the stomach were far larger quantities of small yellowish-white ant cocoons, evidently belonging to this ant. The snake was some centimeters down in clay of the rain forest floor in the midst of chambers of a colony of *Paraponera clavata* Fabr. In digging up the ant colony I unearthed the snake which was killed within a few minutes by the sting of these fierce ants, one of which stung my knee (see "The Sting of An Ant," *Amer. Jour. Tropical Medicine*, 1937, 17: 765-768, Fig. 1, by the author). Both the snake and the *Labidus* are evidently hypogeic and it is quite probable that the snake is a specialized feeder on this and related ants (*Labidus*, *Acamatus*).

This *Labidus* differs from *L. coecum* (Latr.) workers of the same size in mandibular dentation, less coarsely striate mandibles, smoother integument, and in lighter color. It differs from *L. praedator* ssp. *emiliae* Mann workers of the same size in

mandibular dentation, much smoother dentation, and in color. Unfortunately no soldiers were present in the stomach so it is not possible to compare this caste.

REFERENCES CITED

- Bequaert, J.** 1922. The Predacious Enemies of Ants. *Bull. Amer. Mus. Nat. Hist.* 45: 271-331, Pl. I, XXIV, XXV.
Noble, G. K. 1918. The Amphibians Collected by the American Museum Expedition to Nicaragua in 1916. *Bull. Amer. Mus. Nat. Hist.* 38: 311-347, Pls. XIV-XIX.
Weber, N. A. 1934. Notes on Neotropical Ants, Including the Descriptions of New Forms. *Rev. de Ent.* 4: 22-59, 14 Figs.